

**Patent Number(s): JP49045014-A**

**Title:** Dicarboxylic acid glycol esters - prepd. by transesterification in presence of quat. ammonium halides or pyridinium halides, alkali metal hydride and other cpds

**Patent Assignee Name(s) and Code(s):** TOYO SPINNING CO LTD (TOYM-C); (TOYM-C)

**Derwent Primary Accession Number:** 1974-60632V [20]

**Patents Cited by Inventor:** 0

**Citing Patents:** 0

**Articles Cited by Inventor:** 0

**Patents Cited by Examiner:** 0

**Articles Cited by Examiner:** 0

**Abstract:**

Dicarboxylic acid glycol esters are prepd. by transesterification in the presence of (a) quaternary ammonium halides  $R_1R_2R_3R_4N^+X^-$  ( $R_1-4 = 1-23C$  alkyl,  $PhCH_2$ ,  $Ph$ ;  $X =$  halo) or pyridinium halides  $R(C_5H_5N^+)X^-$  ( $R = 1-23C$  alkyl,  $PhCH_2$   $Ph$ ) and (b) alkali metal hydrides or salts,  $M_1M_2R$  complex ( $M_1-2 =$  metal;  $R = H$ ,  $1-4C$  alkyl), phosphines, tertiary amines, or their org. acid salts, with or without usual ester-interchange catalysts. This effects rapid transesterification. In an example, heating 582 parts di-Me terephthalate and 410 parts ethylene glycol with 1.92 parts cetyltrimethyl-ammonium chloride and 0.6 part KOAc at 197 degrees caused 90.5% transesterification in 30 min and the reaction completed in 60 min, compared with 78.3% and 185 min, resp., for the control (0.21 part  $Zn(OAc)_2$ ). Polymn. with  $Sb_2O_3$  gave a colourless polyester of higher intrinsic viscosity.

**Derwent Class:** A41 (Monomers, Condensants (see also Section E)); E19 (Other organic compounds general - unknown structure, mixtures)

**Derwent Manual Code(s):** A02-A; A02-A07; A05-E01A; E10-E04

**Patent Details:**

Patent Number	Publ. Date	Main IPC	Week	Page Count	Language
JP49045014-A	27 Apr 1974		197434		

**Priority Application Information and Date:**

JP089855	07 Sep 1972
----------	-------------